

## **REMARKS**

Reconsideration of this application is requested in view of the amendments to the claims and the remarks presented herein.

The claims in the application are claims 16 to 23, all other claims having been cancelled.

Claims 1, 2, 4 to 6, 8 and 12 to 14 were rejected under 35 USC 112, second paragraph, as being indefinite for the reasons set forth on page 2 to 3 of the office action.

Applicants respectfully traverse this ground of rejection since it is believed that the newly presented claims properly comply with 35 USC 112, second paragraph. All of the claims have now been cancelled and the claims are correct with respect to the sequence ID number and with respect to the spelling of epoxide. The various errors noted by the Examiner have been corrected and it is believed that the present claims do properly define the invention and withdrawal of these grounds of rejection is requested.

Claims 1 to 5, 7 to 10 and 12 to 15 were rejected under 35 USC 112, first paragraph, as not being based upon an enabling disclosure. The Examiner concedes that the disclosure is enabling for the epoxide hydrolase from *Aspergillus niger* having the sequence SEQ ID No: 2 and is encoded by sequence SEQ ID No: 1.

Applicants respectfully traverse these grounds of rejection since the claims are believed to be based upon an enabling disclosure since the claims have been limited as indicated by the Examiner as being enabling. Therefore, withdrawal of this ground of rejection is requested.

Claims 1 to 10 and 12 to 15 were rejected under 35 USC 112, first paragraph, as not being enabled due to the use of the term "pure". The claims have been limited to purifying the epoxide hydrolase to "electrophoretic homogeneity" and therefore, it is deemed that the claims as now presented are properly enabled and withdrawal of this ground of rejection is requested.

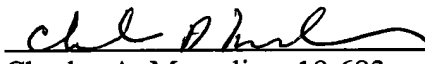
Claims 1, 3, 4, 12, 14 and 15 were rejected under 35 USC 103 as being obvious over the Nellaiah et al reference or the Morisseau et al reference taken in view of the general knowledge of the prior art for reasons of record. The Examiner maintains that the references teach the epoxide hydrolase from *Aspergillus niger* and was purified by centrifugation of the extract and passing through a Q-Sepharose column. The Examiner suggested that Applicants should submit a declaration by one with knowledge in the field of enzyme purification that one of ordinary skill in the art could not purify the enzyme to the purity discussed in the application. Claims 1, 12 and 15 were rejected under 35 USC 103 as being obvious over the Chartrain et al reference taken in view of the general knowledge of the art for reasons of record and suggested submission of a declaration.

Applicants respectfully traverse these grounds of rejection in view of the declaration of Dr. Furstoss filed herewith. As can be seen from the declaration, Dr. Furstoss is one skilled in the art and has presented more than 128 publications on the subject matter of Applicants' invention as well as 132 communications and 83 invited lectures clearly, qualifying him as one skilled in the art. As can be seen from his declaration, one with ordinary skill in the art would be impossible to predict any efficient purification method for this type of enzyme and the epoxide hydrolase preparations discussed therein are not purified preparations and would not lead one skilled in the art to get a purified extract as claimed in the present claims but only a very crude cell extract. Therefore, one of ordinary skill in the art would not have any indication as to the thermostability, the stability in the presence of salts, the type of columns to be used, its stability upon the overall purification process and the like and therefore, one skilled in the art would not be able to produce the same. Therefore, withdrawal of the rejections based upon the Morisseau et al and the Nellaiah et al references be withdrawn.

With respect to the rejection based upon the Chartrain et al reference, Applicants take the position that the reference does not describe that a purification method or even a crude state of epoxy hydrolase activity detected in the two fungi. The reference only mentions an indefinite epoxide hydrolase activity using "suspension of whole fungal cells" of two fungal strains *Dipolia* or *Lasiodiplodia* which have nothing to do with Applicants' *Aspergillus niger*. Therefore, withdrawal of this ground of rejection is requested.

In view of the amendments to the claims and the above remarks and the declaration filed herewith, it is believed that the claims clearly point out Applicants' patentable contribution and favorable reconsideration of the application is requested.

Respectfully submitted,  
Muserlian, Lucas and Mercanti

  
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Enclosures